

C L A I M S

1. Process for the fabricating an electronic integrated
5 circuit comprising the steps consisting in:

- a) Forming, on a substrate (100) of the circuit,
of which a part (100; 103) is composed of
absorbing material, a portion (1) made of a
sacrificial material coming into contact with
10 one face (F) of the part of the substrate
composed of absorbing material;
- b) forming a rigid portion (3, 4) in fixed contact
with the substrate (100), on one side of the
portion of sacrificial material (1) opposite to
15 said face (F) of the part of the substrate
composed of absorbing material; and
- c) heating the circuit in order to create a volume
(V) substantially empty of material by
absorption of the sacrificial material into the
20 part of the substrate composed of absorbing
material (100; 103),

the process being characterized in that the sacrificial
material has a melting point in excess of 900°C and in
that the sacrificial material is chosen so as not to
25 cause any material alteration of parts of the circuit
in contact with the portion of sacrificial material
prior to the step c).

2. Process according to Claim 1, wherein the
sacrificial material includes cobalt, nickel, titanium,
30 tantalum, tungsten, molybdenum, silver, gold, iron
and/or chromium.

3. Process according to Claim 1, wherein the absorbing material includes silicon, germanium, phosphorus, arsenic and/or antimony.

4. Process according to Claim 1, wherein the portion of
5 sacrificial material (1) is formed in a cavity (C) below the level of a surface (S) of the substrate (100).

5. Process according to Claim 1, wherein, at the step
c), the absorption of the sacrificial material into the
10 part of the substrate composed of absorbing material (100; 103) results from a chemical reaction between the sacrificial material and the absorbing material.

6. Process according to Claim 1, wherein said volume
substantially empty of material (V) has a large cross
15 section substantially parallel to a surface of the substrate (S).

7. Process according to Claim 1, furthermore
comprising, between the steps a) and b), a formation of
an intermediate layer (2), said intermediate layer
20 being located, when the step b) is complete, between the portion of sacrificial material (1) and the rigid portion (3, 4).

8. Process according to Claim 1, wherein the volume (V)
substantially empty of material is situated between two
25 electrodes (3, 5) of a capacitor belonging to said circuit.

9. Process according to Claim 8, wherein the rigid
portion comprises a first electrode (3) of the
capacitor.

10. Process according to Claim 8, wherein the part of the substrate composed of absorbing material (100; 103), after absorbing the sacrificial material in the step c), comprises a second electrode of the capacitor
5 (5).

11. Process according to Claim 8, wherein at least one of the two electrodes (3, 5) has a main surface (P) substantially parallel to a substrate surface (S).

12. Electronic integrated circuit fabricated using a
10 process according to Claim 1.

13. Electronic integrated circuit according to Claim 12, wherein the volume (V) substantially empty of material is located within a layer of metallization level (M1) of said circuit.